

反应堆工程

# 中国实验快堆燃料组件频率测量试验

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**摘要** 堆芯的安全性极其重要, 反应堆堆芯组件的抗震分析比较困难。为给中国实验快堆堆芯组件的数值分析提供依据, 同时也为安全审评提供基本数据, 利用动态测量系统完成了单根燃料组件分别在空气和水介质中频率的测量。试验中, 分别采用了3档不同幅值的激励力。考虑安装公差对频率的影响, 采用重新安装燃料组件的方法重复测量。经分析, 试验结果合理可靠。

关键词 [燃料组件](#) [频率](#) [振型](#)

分类号

## Frequency Measurement Test on Fuel Assembly of China Experimental Fast Reactor

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**Abstract** Although the seismic analysis of core assemblies is very difficult, it is important to the safety analysis of the reactor core. In order to support the numerical analysis of core assemblies and safety evaluation of China Experimental Fast Reactor (CEFR), the frequency of a single fuel assembly of CEFR was separately measured in air and water respectively by a dynamic system. During the measurement, three different range excitation forces were applied. Considering of installation tolerance, the measurement test was repeated on the fuel assembly installed again. The result of frequency measurement test was analyzed and it is thought to be reasonable and credible.

**Key words** [fuel](#) [assembly](#) [frequency](#) [vibrate](#) [mode](#)

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